

WHAT IS CLAIMED IS:

1. A clamping apparatus for electrically connecting at least a first ground wire to a grounding member, the clamping apparatus comprising:

5 a bottom clamping member comprising a bottom medial portion and a threaded hole on both sides of the bottom medial portion;

 a top clamping member cooperating with the bottom clamping member and comprising a top medial portion aligned to cooperate with the bottom medial portion and corresponding holes on either side of a top medial portion that
10 correspond to, and are slightly larger in diameter than, the threaded holes to allow a screw to pass through each hole in the top clamping member and thread into the corresponding threaded hole in the bottom clamping member, thereby providing a clamping action around the ground member between the top and bottom clamping members when the screws are tightened; and

15 a trough comprising a base wall and a first and second side wall, the trough being attached via the base wall to the top medial portion of the top clamping member on a side opposite the bottom clamping member, the first sidewall comprising a threaded hole and a set screw adapted to tighten against the second sidewall, wherein the trough is arranged with an opening between the
20 first and second sidewall so that the first ground wire can be laid-in the trough at some intermediate point on the ground wire and tightening the set screw applies clamping pressure to the first ground wire between the set screw and the second side wall.

25 2. The clamping apparatus of claim 1, wherein the trough is oriented so that the clamped first ground wire is situated in a direction substantially parallel to the grounding member.

3. The clamping apparatus of claim 1, wherein the trough is oriented so that the clamped first ground wire is situated in a direction substantially perpendicular to the grounding member.

5 4. The clamping apparatus of claim 1, wherein one or both of the top and bottom medial portions are crowned in a direction away from the respective other medial portion to create an opening between the top and bottom clamping members for accommodating the grounding member.

10 5. The clamping apparatus of claim 4, wherein one or both of the crowned medial portion(s) has a serrated surface within the opening between the top and bottom clamping members for accommodating the grounding member.

15 6. The clamping apparatus of claim 1, wherein the set screw has a rounded end for applying clamping pressure against the first ground wire.

20 7. The clamping apparatus of claim 1, wherein the set screw further includes a sliding wedge affixed to an end of the set screw, the wedge adapted to move through the trough as the set screw is tightened and to engage the first ground wire for applying clamping pressure against the first ground wire in cooperation with the second sidewall.

25 8. The clamping apparatus of claim 1, wherein the trough is adapted to accommodate an additional second ground wire laid-in along side the first ground wire in the trough, said first and second ground wires being mechanically and electrically connected by the clamping pressure of set screw.